



## STATE & PRIVATE FORESTRY FOREST HEALTH PROTECTION SOUTH SIERRA SHARED SERVICE AREA



October 30, 2014  
File No. 3420

**Subject: Recommendations for post-treatment of Infested pines  
Onion Valley Campground, Inyo National Forest**

### **Background**

Since 2004, Inyo National Forest has experienced widespread native bark beetle infestations. Currently, the most severe mortality has been concentrated in upper elevation whitebark pine stands throughout the Forest. Mountain Pine beetle (*Dendroctonus ponderosae* Hopkins, MPB) is the primary bark beetle that infests five-needled pines throughout western forests, and favors mature larger diameter stems. Pine engravers in the species *lps*, are considered less aggressive but can be problematic in post-treatment due to their rapid development in green slash, having multiple generations annually.

Prevention is the best method of control for most bark beetles. Proper treatment of infested material to prevent subsequent beetle migration into residual trees is important to keeping populations at low levels. While the removal of *currently* MPB-infested material can be helpful in reducing local populations, further treatments to alter existing stand conditions are still recommended to deter beetle attraction to the general area. Monitoring in residual stands can estimate beetle movement. Pine engravers can be more easily prevented or treated if infestations do occur.

### **Options for *lps* prevention**

By eliminating suitable brood material, *lps* populations will disperse rather than concentrate in slash piles. Pine engravers prefer small-diameter stems (less than 6 inches), but will infest larger diameter green material if it is available. Prevention of first generation of beetles to develop in the early spring keeps overall populations low. Options for proper slash treatment:

- **Bucking.** With all treatments, cutting slash into small bolts (less than 2 foot lengths) is highly recommended. Shorter logs dessicate more rapidly than long, but bark thickness is often what determines suitability. Treatments that can accelerate dessication such as scarification or bark removal in addition to smaller lengths will reduce infestation.
- **Lop-and-scatter.** Mechanical mastication treatments typically batter wood and bark, such that material is unfavorable for infestation. If hand work is planned, then lop-and-scatter methods help disperse material across treatment areas to prevent concentration of beetles in one pile.
- **Chipping.** Reduction of green material to small chips will temporarily attract insects but will not incite further infestation into residual stands.
- **Solarization.** If piles are small, then covering them tightly with 4-mil clear sheeting can generate intense heat, seasoning wood or killing more than 80% of beetle brood if infested.

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- **Burning.** Piling of green material typically follows thinning treatments. If pile burning is prescribed, then burning of infested material is to prevent beetle emergence, while burning green material will prevent infestation. If burning is delayed, move piles away from residual hosts into full-sun locations to create some solarization.

District personnel know about risk of firewood movement as vectors of pests. While the proposed treatments and materials are not likely to be infested with exotic pests, less movement of the material is encouraged.

If there are any questions regarding this information, please do not hesitate to contact Forest Health Protection.

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